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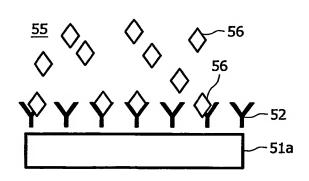
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(54) Title: LABEL-FREE DETECTION OF BIOMOLECULES



(57) Abstract: The invention provides a method and a device for label-free detection of biomolecules or analytes in a sample liquid. The method comprises the steps of allowing an analyte to bind to one of at least two conductive surfaces. An alternating electrical field between at least two conductive surfaces. Amplitude and phase of an alternating current, flowing between the at least two conductive surfaces, are compared with amplitude and phase of a reference signal. From the difference between both currents it is possible to determine whether an analyte is present at the conductive surface.